

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

. APPLICATION NO.	ı	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/912,411		04/19/2001	Terrence Edwards Rogers	P12614	9890		
20792	· 7590	09/30/2005		EXAM	EXAMINER		
MYERS B	IGEL SI	BLEY & SAJOVEO	DEBERADINI	DEBERADINIS, ROBERT L			
PO BOX 37 RALEIGH,		527	ART UNIT	PAPER NUMBER			
,				2836			
				DATE MAILED: 09/30/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	ation No.	Applicant(s)		
		09/912	,411	ROGERS, TERR	ROGERS, TERRENCE EDWARDS	
Office Action Summary		Examin	ier	Art Unit	m	
		Robert	DeBeradinis	2836	((4))	
Period fo	The MAILING DATE of this communior Reply	cation appears on t	the cover sheet wi	th the correspondence a	ddress	
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FO CHEVER IS LONGER, FROM THE MA nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this common to period for reply is specified above, the maximum state are to reply within the set or extended period for reply verily received by the Office later than three months after ed patent term adjustment. See 37 CFR 1.704(b).	AILING DATE OF of 37 CFR 1.136(a). In no unication. tutory period will apply and will, by statute, cause the a	THIS COMMUNIC event, however, may a n d will expire SIX (6) MON application to become AB	CATION. eply be timely filed THS from the mailing date of this of the capacity of the capaci		
Status			•			
1)	Responsive to communication(s) filed	d on 19 April 2001.				
2a)□	•	b)⊠ This action is				
3)	Since this application is in condition f	,	•	ers, prosecution as to th	e merits is	
٠,٣	closed in accordance with the practic		•	•		
Dispositi	on of Claims					
4) 又	Claim(s) 1-20 is/are pending in the ap	oplication.				
• —	4a) Of the above claim(s) is/ar	•	consideration.			
	Claim(s) <u>19 and 20</u> is/are allowed.					
· · · · · ·	Claim(s) <u>1-7,12,14 and 15</u> is/are reje	cted.				
·	Claim(s) <u>8-11,13 and 16-18</u> is/are ob					
·	Claim(s) are subject to restrict		requirement.			
Applicati	on Papers					
9)□	The specification is objected to by the	Examiner.				
· —	The drawing(s) filed on 19 April 2001		ted or b)⊠ objec	ted to by the Examiner.		
<i>,</i> —	Applicant may not request that any object		,	•		
	Replacement drawing sheet(s) including				FR 1.121(d).	
11)	The oath or declaration is objected to	by the Examiner.	Note the attached	Office Action or form P	TO-152.	
Priority u	ınder 35 U.S.C. § 119					
	Acknowledgment is made of a claim fo ☐ All b)☐ Some * c)☐ None of:	or foreign priority u	ınder 35 U.S.C. §	119(a)-(d) or (f).		
	1. Certified copies of the priority of	documents have be	een received.			
	2. Certified copies of the priority of	documents have be	een received in A	oplication No		
	3. Copies of the certified copies of	of the priority docum	nents have been	received in this National	Stage	
	application from the Internation	` ^ ·				
* S	see the attached detailed Office action	for a list of the ce	rtified copies not i	received.		
Attachmen	t(e)		•			
	e of References Cited (PTO-892)		4) Interview S	ummary (PTO-413)		
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PT		Paper No(s)/Mail Date		
	nation Disclosure Statement(s) (PTO-1449 or F r No(s)/Mail Date <u>7/10/02,9/5/03</u> .	PTO/SB/08)	5) Notice of In 6) Other:	formal Patent Application (PT)	O-152)	

Application/Control Number: 09/912,411 Page 2

Art Unit: 2836

DETAILED ACTION

Drawings

The drawing (figure 1) is objected to because the functional blocks are not labeled with their functional names. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

The IDS submitted on 9/5/03 was not considered because numbers are not readable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 09/912,411 Page 3

Art Unit: 2836

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 7, 12 are rejected under 35 U.S.C. 102(a) as being anticipated by CHEHADI 6,437,609.

Regarding claims 1, 12.

CHEHADI discloses a voltage regulation system comprising a first voltage regulator configured to receive an input voltage (VR) from a power source and to produce a first output voltage for a first electrical circuit; a controller (230) coupled to the first voltage regulator (220) and configured to change the first output voltage to a second output voltage; and a second voltage regulator configured to receive either of the first output voltage or the second output voltage, and to produce a third output voltage for a second electrical circuit (HV).

Regarding claim 7.

CHEHADI teaches the voltage regulation system according to claim 1, wherein the first electrical circuit comprises a radio frequency transmitter (SR) and the second electrical circuit comprises a radio frequency receiver (VR).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 09/912,411

Art Unit: 2836

Claims 2, 3, 5, 6, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHEHADI 6,437,609 in view of NGUYEN 6,188,206.

Regarding claim 2.

CHEHADI discloses the voltage regulation system according to claim 1.

CHEHADI is silent wherein the first voltage regulator comprises a buck voltage regulator.

NGUYEN teaches a voltage regulator converts an input voltage to a regulated output voltage and there are many types and applications for voltage regulators, one such type is a switching DC-to-DC step-down regulator or buck regulator (column 1).

It would have been obvious to one having ordinary skill in the art at the time of this invention to have modified the first regulator to be a buck regulator. The motivation would have been to reduce the regulator size (col. 1, line 13).

Regarding claim 3.

CHEHADI discloses the voltage regulation system according to claim 1.

CHEHADI is silent wherein the first voltage regulator comprises a boost voltage regulator.

NGUYEN teaches a voltage regulator converts an input voltage to a regulated output voltage and there are many types and applications for voltage regulators.

It would have been obvious to one having ordinary skill in the art at the time of this invention to have modified the first regulator to be a boost regulator. The motivation would have been to boost the VR voltage.

Application/Control Number: 09/912,411

Art Unit: 2836

Regarding claims 5, 6, 14, 15.

CHEHADI discloses the voltage regulation system according to claim 1.

NGUYEN teaches a voltage regulator converts an input voltage to a regulated output voltage and there are many types and applications for voltage regulators.

It would be obvious to one of ordinary skill in the art to merely arrange voltage regulators to provide a desired voltage regulation system.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over CHEHADI 6,437,609 in view of ANTOSZKIEWICZ 20010003417.

Regarding claim 4.

CHEHADI discloses the voltage regulation system according to claim 1.

CHEHADI is silent wherein the first voltage regulator comprises a series pass voltage regulator.

ANTOSZKIEWICZ teaches linear series pass regulator is used when high precision is required (paragraph 20).

It would have been obvious to one having ordinary skill in the art at the time of this invention to use a series pass voltage regulator. The motivation would be to reduce regulation noise.

Allowable Subject Matter

Claims 19, 20 allowable over the prior art of record.

Claims 8-11, 13, 16-18 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (571) 272-2049. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Sircus, can be reached on (571) 272-2058. The Fax phone number for this Group is (703) 872-9306.

RLD

SEPTEMBER 27, 2005

ROBERT L. DEBERADINIS PRIMARY EXAMINER